

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:
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PCT

NOTIFICATION OF TRANSMITTAL OF
INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

F23

(PCT Rule 71.1)

Date of Mailing
(day/month/year)

19 APR 2002

Applicant's or agent's file reference

23

IMPORTANT NOTIFICATION

International application No.

International filing date (day/month/year)

Priority date (day/month/year)

PCT/US99/28913

06 December 1999 (06.12.1999)

05 July 1996 (05.07.1996)

Applicant

BRAD A. ARMSTRONG

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US

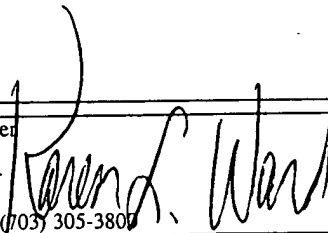
Commissioner of Patents and Trademarks
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Authorized officer

Jeffery A. Brier

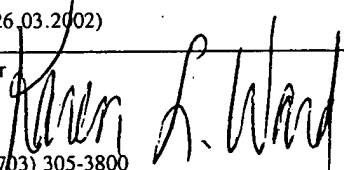
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PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 23	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/28913	International filing date (<i>day/month/year</i>) 06 December 1999 (06.12.1999)	Priority date (<i>day/month/year</i>) 05 July 1996 (05.07.1996)
International Patent Classification (IPC) or national classification and IPC IPC(7): G09G 5/08; G06K 11/18; G06F 3/02 and US Cl.: 345/161, 168		
Applicant BRAD A. ARMSTRONG		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>22</u> sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input checked="" type="checkbox"/> Certain observations on the international application 		
Date of submission of the demand 26 June 2001 (26.06.2001)	Date of completion of this report 26 March 2002 (26.03.2002)	
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Jeffery A. Brier  Telephone No. (703) 305-3800	

Form PCT/IPEA/409 (cover sheet)(July 1998)

I. Basis of the report

1. With regard to the elements of the international application:*

- the international application as originally filed.
- the description:
 pages 1-54 _____ as originally filed
 pages NONE _____, filed with the demand
 pages NONE _____, filed with the letter of _____
- the claims:
 pages NONE _____, as originally filed
 pages NONE _____, as amended (together with any statement) under Article 19
 pages 55-76 _____, filed with the demand
 pages NONE _____, filed with the letter of _____
- the drawings:
 pages 1-40 _____, as originally filed
 pages NONE _____, filed with the demand
 pages NONE _____, filed with the letter of _____
- the sequence listing part of the description:
 pages NONE _____, as originally filed
 pages NONE _____, filed with the demand
 pages NONE _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in printed form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages NONE
- the claims, Nos. NONE
- the drawings, sheets/fig NONE

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

I. STATEMENT

Novelty (N)	Claims <u>Please See Continuation Sheet</u>	YES
	Claims <u>Please See Continuation Sheet</u>	NO
Inventive Step (IS)	Claims <u>Please See Continuation Sheet</u>	YES
	Claims <u>Please See Continuation Sheet</u>	NO
Industrial Applicability (IA)	Claims <u>Please See Continuation Sheet</u>	YES
	Claims <u>Please See Continuation Sheet</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 26-28, 48-94 lack novelty under PCT Article 33(2) as being anticipated by Armstrong, U.S. Patent No. 5,589,828. This reference describes a 6 DOF image controller which uses pressure sensors developing variable output in response to variable user input, col. 13 lines 35-43. A 6DOF has both first and second two-axes input structures. The hand and finger may actuate handle 100. Active feedback is described at col. 9 line 24 and col. 14 line 24 and passive feedback (breakover) at col. 13 line 29 and col. 14 line 24.

Claims 48, 56, and 101-107 lack novelty under PCT Article 33(2) as being anticipated by Sekine, U.S. Patent No. 5,898,425. Figures 2 and 3 illustrate a pivotable button 31 connected to pressure sensitive sensors used a pointing device for a computer where pointing devices control the movement of a pointer on a display device. In the paper from applicant received with the Demand applicant stated that "claims 97-119 are identical to those issued in my U.S. Patent 6,222,525". However, claims 101-104 do not have all the limitations of the patented claims and are fully met by this reference.

Claims 72-82 lack novelty under PCT Article 33(2) as being anticipated by Armstrong, U.S. Patent No. 5,565,891. This reference describes a 6 DOF image controller. Col. 8 lines 26-30 describes break over tactile feedback and col. 11 lines 29-31 describes variable sensitive sensors and figure 2 shows several buttons 102, 114, and 106 which receive variable pressing from the user.

Claims 12-25 and 29-38 lack an inventive step under PCT Article 33(3) as being obvious over Armstrong, U.S. Patent No. 5,589,828. Armstrong does not explicitly describe having a finger depressible independent button in addition to the two-axes input structures. This would have been obvious because Armstrong suggests by describing the input structures as being used in the joystick environment which is known to have finger depressible independent buttons in addition to the joystick handle.

Claims 39-47, 97-100, and 108-119 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a sheet supporting the sensors for the joystick handle and the sensors for the finger depressible buttons.

----- NEW CITATIONS -----

US 5,898,425 A (SEKINE) 27 April 1999, see figures 2 and 3 and col. 5 lines 11-57.

US 5,589,828 A (ARMSTRONG) 31 December 1996, see figures 1, 2, 4, 6, 7, 9, 10, col. 2 line 12 to col. 4 line 60 and col. 13 lines 29-31.

US 5,565,891 A (ARMSTRONG) 15 October 1996, see figures 9 and 10 and col. 2 line 23 to col. 4 line 48.

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the questions whether the claims are fully supported by the description, are made:

The description is objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 5 because it fails to adequately enable practice of the claimed invention because: The first button structured to rotate upon depression by a finger causing a proportional sensor to be activated and a second button structured to rotate upon depression by a finger causing a proportional sensor to be activated were not described and enabled in the specification. In figure 28 and at page 43 lines 4-7 and 9-12 and at page 37 lines 18-27 applicant described a button structure 376 which rotates about an integrated cylindrical fulcrum 380 to activate sensor 384. The sensor was not described as being a proportional sensor. Thus, the specification did not enable a rotating button producing a proportional electrical output.

Claims 1-11, 95 and 96 are objected to as lacking clarity under PCT Rule 66.2(a)(v) because practice of the claimed invention is not enabled as required under PCT Rule 5.1(a) for the reasons set forth in the immediately preceding paragraph.

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

V.1. Reasoned Statements:

The opinion as to Novelty was positive (Yes) with respect to claims 1-11, 12-25, 29-38, 39-47, 95, 96, 97-100, and 108-119.
The opinion as to Novelty was negative (No) with respect to claims 26-28, 48-94, and 101-107.
The opinion as to Inventive Step was positive (Yes) with respect to claims 1-11, 39-47, 95, 96, 97-100, and 108-119.
The opinion as to Inventive Step was negative (NO) with respect to claims 12-38, 48-94 and 101-107.
The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-119.
The opinion as to Industrial Applicability was negative (NO) with respect to claims NONE.